

**AMENDMENTS TO THE DRAWINGS**

Submitted herewith is one replacement drawing. The submitted drawing is intended to replace the previously submitted drawing.

Attachment: One (1) Replacement Sheet (containing FIG. 5).

**REMARKS**

Claims 1-10 are pending in the application and claims 5-10 are withdrawn from consideration. Claims 1-4 stand rejected.

Claim 2 is hereby canceled by this Amendment without prejudice or disclaimer.

**Drawing Objections**

The Examiner has objected to figure 5 indicating this figure should be designated by a “prior art” legend.

In response, Applicants submit that replacement figure 5, which includes a “Related Art” label, obviates this objection.

**Claim Objections**

Claim 2 is objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim.

This objection is moot as claim 2 is canceled by this Amendment.

**Claim Rejections - 35 U.S.C. § 103(a)**

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art (APA; paragraph references to US 2005/0263207) in view of Saitoh (US 6,228,153)

Claim 1 recites, *inter alia*, positioning a plurality of liquid delivery units, which are actuatable by a single drive shaft, each for intermittently drawing in and discharging a fluid at a constant rate by progressively pressing a flexible resilient tube with presser rollers, parallel to each other, discharging flows of the plastic raw material liquid at different times from each other from said liquid delivery units.

In the rejection, the examiner provides:

Saitoh discloses a method of introducing a liquid (abstract) which includes positioning a plurality of delivery units, which are actuatable by a single drive shaft (abstract), each for intermittently drawing in and discharging a fluid at a constant rate (figs. 4a, 4c, 9a; col. 5, lines 6-20; col. 10, lines 20-53) parallel to each other (figs. 4a, 4c, 9a; col. 5, lines 6-20), discharging flows of the liquid at different times from each other from the liquid delivery units (col. 5, lines 17-20; col. 10, lines 20-53), and combining the flows of the liquid discharged from the liquid delivery units (figs. 4a, 4c, 9a; col. 5, lines 6-20).

Office Action, p. 4.

Applicants respectfully submit the Examiner has misinterpreted Saitoh. Specifically, Saitoh fails to disclose a plurality of delivery units which are actuated by a single drive shaft and parallel to each other. In fact, Saitoh only describes pumps disposed in series, not parallel. Further, Saitoh only discloses that these pumps are actuated at the same time, not at different times.

For instance, Saitoh expressly discloses “The primary pump 5A and the secondary pump 5B are connected in *series*” (column 7, lines 56 to 57) and “FIG. 2 shows as an example one of the two pump units comprising the twin pump heads for the primary and secondary pumps. It is composed of two heads operated by a plunger rod 51 made of one single shaft. The plunger rod 51 has two different diameters and forms one plunger on its small diameter side for the secondary pump 5B and the other plunger at the edge of large and small diameters for the primary pump 5A.” (Column 8, lines 29 to 37). Consequently, Saitoh discloses that a plurality of delivery units connected in series, not parallel, are actuatable at the same time, not at different times from each other, by a single drive shaft. For example, Saitoh would result in the following claim A.

Claim A: "A method characterized by:

positioning a plurality of liquid delivery units, which are actuatable by a single drive shaft, each for intermittently drawing in and discharging a fluid at a constant rate by moving a

plunger back and forth in a cylinder to change the volume of the cylinder, series to each other,  
discharging flows of the solvent at the same time from said liquid delivery units, combining the  
flows of the solvent discharged from said liquid delivery units, with each other."

In addition, Saitoh would also result in the following Claim B, which is based on the  
description of "The parallel delivery pump system in FIG. 9(a) is most popular, wherein the two  
plungers 50A and 50B are connected in parallel. The eluent is drawn respectively into the  
plungers 50A and 50B, and is then sent out alternately from them to keep the eluent delivery  
continuously, as shown by the arrow marks."(Column 5, lines 15 to 20).

Claim B: "A method characterized by:

positioning a plurality of liquid delivery units each for intermittently drawing in and  
discharging a fluid at a constant rate by moving a plunger back and forth in a cylinder to change  
the volume of the cylinder, parallel to each other, discharging flows of the solvent at different  
times with each other from said liquid delivery units, combining the flows of the solvent  
discharged from said liquid delivery units, with each other."

Accordingly, as evidenced by the examples above, Saitoh fails to disclose, fairly suggest  
or render obvious, a plurality of delivery units connected in parallel that are actuatable at  
different times from each other by a single drive shaft due to mechanism of a plunger pump.

Therefore, Saitoh fails to disclose a method characterized by: positioning a plurality of  
liquid delivery units, which are actuatable by a single drive shaft, each for intermittently drawing  
in and discharging a fluid at a constant rate by moving a plunger back and forth in a cylinder to  
change the volume of the cylinder, parallel to each other, discharging flows of the solvent at  
different times with each other from said liquid delivery units, combining the flows of the

solvent discharged from said liquid delivery units, with each other. with each other from said liquid delivery units.

Moreover, the APA fails to compensate for Saitoh's deficiencies in this regard. Thus, even if the APA and Saitoh are combined as suggested, the suggested combination fails to disclose or render obvious the combination of features recited in claim 1.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/David P. Emery/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: September 23, 2009

---

David P. Emery  
Registration No. 55,154